

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1 to 25 (canceled).

26. (New) A lithium electrochemical cell battery comprising at least one positive electrode, at least one liquid electrolyte comprising at least one lithium salt, and at least one negative electrode, wherein said battery comprises at least one layer of a gelled separator GS comprising at least one polymer GP, able to be gelled by the liquid electrolyte, which is at least partly gelled by the liquid electrolyte, in contact with the negative electrode, and in that it includes at least one layer of a plasticized separator PS comprising at least one polymer PP, able to be plasticized by the liquid electrolyte, which is in contact with the layer of separator GS.

27. (New) The battery according to claim 26, wherein the separator PS layer is at least partly in contact with the positive electrode.

28 (New) The battery according to claim 26, wherein the battery comprises, in addition, another separator GS layer, at least partly between the positive electrode and the separator PS layer.

29. (New) The battery according to claim 26, wherein the polymer PP is selected from the group consisting of polyvinylidene fluoride PVDF, polystyrene PS, polyvinyl chloride PVC, polycarbonate PC, ethylene-propylene-diene monomer EPDM, and derivatives thereof; preferably, the polymer PP is selected from the group consisting of polyvinylidene fluorides PVDFs and (polyvinylidene fluoride)-co-(hexafluoropropylene) PVDF-HFP copolymers, and even more preferably the polymer PP is a PVDF-HFP.

30. (New) The battery according to claim 26, wherein the polymer GP is selected from the group consisting of polymethyl methacrylate PMMA, polyethylene oxide PEO and polyacrylonitrile PAN, and derivatives thereof; preferably, the polymer PG is PEO.

31. (New) The battery according to claim 26, wherein the positive electrode comprises carbon, active material, polymer PP and optionally at least one plasticizer.

32. (New) A process for manufacturing a lithium electrochemical cell battery comprising at least one positive electrode, at least one liquid electrolyte comprising at least one lithium salt, and at least one negative electrode comprising an assembly of at least one layer of gelled separator GS, comprising at least one polymer GP, able to be gelled by the liquid electrolyte, on the negative electrode, of at least one layer of plasticized separator PS, comprising at least one polymer PP, able to be plasticized by the liquid electrolyte, on said separator GS layer, and optionally of at least one other layer of gelled separator GS, comprising at least one polymer GP, on said separator PS layer, the combination of these two or three layers constituting a separator between the negative electrode and the positive electrode, an assembly of said separator on the positive electrode, and an impregnation of said separator by the liquid electrolyte.

33. (New) The process according to claim 32, wherein the positive electrode is manufactured in solution from polymer PP, carbon, active material, plasticizer and solvent.

34. (New) The process according to claim 32, wherein the positive electrode is manufactured by extrusion from polymer PP, carbon, active material and plasticizer.

35. (New) The process according to claim 32, wherein the separator PS layer is manufactured in solution from polymer PP, plasticizer and solvent.

36. (New) The process according to claim 32, wherein the separator PS layer is manufactured by extrusion from polymer PP, plasticizer or liquid electrolyte.

37. (New) The process according to claim 32, wherein the separator GS layer is manufactured in solution from polymer GP, solvent and optionally plasticizer.

38. (New) The process according according to claim 32, wherein the separator GS layer is manufactured by extrusion from polymer GP, and optionally plasticizer or liquid electrolyte.

39. (New) The process according to claim 32, wherein the polymer PP is generally filled with at least one mineral compound selected from the group consisting of MgO, SiO₂, Al₂O₃, TiO₂, BaTiO₃, LiI and LiAlO₂.

40. (New) The process according to claim 32, wherein the polymer GP is generally filled with at least one mineral compound selected from the group consisting of MgO, SiO₂, Al₂O₃, TiO₂, BaTiO₃, LiI and LiAlO₂.

41. (New) The process according to claim 32, wherein the two or three PS and GS layers are joined together into a separator by hot lamination or hot calendering.

42. (New) The process according to claim 32, wherein said layers form a three-layer separator obtained by passing the separator PS layer into a solution of polymer GP, or into a solution of liquid electrolyte in which the polymer GP has been dissolved.

43. The process according to claim 32, wherein said layers form a bilayer separator obtained by passing a separator PS layer (4), preassembled with the positive electrode, into a solution of polymer GP or into a solution of liquid electrolyte in which the polymer GP has been dissolved.

44. (New) The process according to claim 32, wherein the positive electrode and the separator are generally joined together by hot lamination or hot calendering in order to form a plastic complex.

45. (New) The process according to claim 32, wherein the plasticizer(s) optionally present in the positive electrode/separator assembly is (are) removed by washing or vacuum extraction so as to obtain an assembly containing virtually no plasticizer.

46. (New) The process according to claim 32, wherein the separator/positive electrode assembly, preferably containing virtually no plasticizer, is generally brought into contact with the negative electrode by a lamination or calendering step.

47. (New) The process according to claim 32, wherein the plasticizer optionally present is selected from the group consisting of PEO oligomers, dibutyl phthalate (DBP) and propylene carbonate (PC).

48. (New) The process according to claim 32, wherein the polymer PP is selected from the group consisting of polyvinylidene fluoride PVDF and (polyvinylidene fluoride)-co-(hexafluoropropylene) PVDF-HFP; preferably, the polymer PP is PVDF-HFP.

49. (New) The process according to claim 32, wherein the polymer GP is selected from the group consisting of polyethylene oxide PEO and polyacrylonitrile PAN, and derivatives thereof; preferably, the polymer GP is PEO.

50. (New) A hybrid vehicle, an electric vehicle, or a stationary or portable equipment including a battery of claim 26.

51. (New) A hybrid vehicle, an electric vehicle, or a stationary or portable equipment including a battery manufactured by the process of claim 32.